

Return on Investment (ROI) Program Funding Application

This template was built using the ITD ROI Submission Intranet application.

FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform post implementation outcome audits for all Pooled Technology funded projects and may perform audits on other projects.

This is a Pooled Technology Fund Request. Amount of funding requested: \$823,996.25

Section I: Proposal

Date:	8/6/2003
Agency Name:	Information Technology Enterprise
Project Name:	Enterprise Data Warehouse
Agency Manager:	Randy Clemenson
Agency Manager Phone Number / E-Mail:	(515)725-0368 / randy.clemenson@itd.state.ia.us
Executive Sponsor (Agency Director or Designee):	John Gillispie (ITD)

D. Statutory or Other Requirements

Is this project or expenditure necessary for compliance with a Federal law, rule, or order?

☐ YES (If "Yes", cite the specific Federal law, rule or order, with a short explanation of how this project is impacted by it.)

Explanation:

Is this project or expenditure required by state law, rule or order?

☒ YES (If "YES", cite the specific state law, rule or order, with a short explanation of how this project is impacted by it.)

Explanation:

Senate File 2433 on E-Commerce and Digital Government.

Does this project or expenditure meet a health, safety or security requirement?

☐ YES (If "YES", explain.)

Explanation:

Is this project or expenditure necessary for compliance with an enterprise technology standard?

☒ YES (If "YES", cite the specific standard.)

Explanation:

The Teradata Enterprise Data Warehouse (EDW) creates a commonality across a platform with standardized data definitions, establishing the ability to directly link data from multiple agencies in common use applications. Each agency maintains authority over its data, assuring the integrity and security of who and how the information is accessed. This enterprise project provides the platform for utilizing multiple diverse external and internal databases to answer key business questions and determine

areas of non-compliance to state laws, rules, and regulations.

[This section to be scored by application evaluator.]

Evaluation (20 Points Maximum)

If the answer to these criteria is "no," the point value is zero (0). Depending upon how directly a qualifying project or expenditure may relate to a particular requirement (federal mandate, state mandate, health-safety-security issue, or compliance with an enterprise technology standard), or satisfies more than one requirement (e.g. it is mandated by state and federal law and fulfills a health and safety mandate), 1-20 points awarded.

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E. Impact on Iowa's Citizens

a. Project Participants

List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, other levels of government, etc.) and provide commentary concerning the nature of participant involvement. Be sure to specify who and how many **direct** users the system will impact. Also specify whether the system will be of use to other interested parties: who they may be, how many people are estimated, and how they will use the system.

Response:

This is an enterprise project sponsored by Information Technology Enterprise to support and maintain an enterprise data warehouse platform. Criminal and Juvenile Justice Planning (CJJP) Division of the Department of Human Rights, Department of Revenue (DOR), Department of Corrections (DOC), and the Iowa Judicial Courts are partner agencies and data contributors. Also included is the U.S. Treasury for Internal Revenue Service tax collection.

The Division of Criminal and Juvenile Justice Planning is collaborating with the Iowa Department of Transportation to provide information from the data warehouse to support a Model Impaired Driving Records Information System. The aggregate current and historical statistical information from the CJJP is needed by the highway safety office, the legislature and stakeholders to manage responsibilities effectively and efficiently; to assess the scope and nature of the impaired driving problem; and to develop, target, and evaluate effective countermeasures. The Department of Corrections is starting a pilot project with Polk County to exchange real time data for offender charges, arrests, and supervision status. This pilot project would allow the data entry at point of contact and eliminate duplicate data entry between agencies. It would also allow for timely tracking of offenders and re-offenders would be identified and reviewed to ensure public safety. During the next cycle, the prison data, including medical information and key data from the Board of Parole, will be added to the data warehouse, increasing the amount of information available for use.

The Department of Revenue implemented the Tax Gap Compliance Program to support the departments mission to accurately collect all tax owed to the State of Iowa. Through the development and implementation of data warehousing, the Tax Gap Compliance Program has successfully generated \$30,000,000 in additional tax revenues during the 3-year project development and implementation period. The program will continue to build a strong revenue stream with anticipated revenues of at least \$10,000,000 annually.

The integrated database structure enables the matching of data from diverse source systems to perform sophisticated queries with drill-downs to analyze the data to identify and generate improved and more accurate tax gap leads. Through enhanced modeling, the department can better measure tax non-compliance issues and to better understand the reasons for non-compliance, providing opportunities to improve communication, education, and services and promote voluntary compliance.

The department continues to enhance the database model through the integration of new external sources into the data warehouse. This additional data will enhance tax compliance analysis by providing a broader base of information and complimenting existing information.

b. Service Improvements

Summarize the extent to which the project or expenditure improves service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response:

Agencies will be able to coordinate information deployment and dissemination to mutual client bases. State staff will have access to uniform data to support their work activities. Agencies will have the means to both publicly and securely disseminate more information in a more timely fashion needed by citizens, legislators, other agencies, service providers, and federal partner organizations. Those who rely on the same information will be accessing the same data set, promoting uniformity of information. The EDW leads to customer service improvements in the following ways.

Criminal & Juvenile Justice Planning (CJJP) and Department of Corrections (DOC)

1. The first iteration of the EDW was able to provide answers to all 91 correctional impact statements in FY01 that involved penalty changes. This significantly helped the Legislature predict the revenue impact of altering penalties for 100 different traffic violations that affected 294,000 convictions annually. Previously, no data for any correctional impact statements involving penalty changes for simple misdemeanors or scheduled violations could to be provided (which amounted to 20% of all impact statements in FY00).

2. During FY02, the Justice Data Warehouse was used to provide answers to 55 correctional impact statements, including using juvenile court information to provide an estimate of the impact of a proposed expansion of mandatory juvenile waivers to adult court. Another analysis tracked domestic abuse cases over a 3.5 year period and identified what portion of offenders were later cited for violations of no-contact orders.

3. During the FY03 legislative session, CJJP completed 98 correctional impact statements. Of these, 79 or 81% utilized JDW information. The only impact statement requests not now answerable by the JDW are those involving the definition of new offenses where there is no readily available comparison with existing offenses, as well as some bills affecting agency policies or discretion.

4. CJJP staff were able to reduce query and reporting costs for an estimated \$431,459.85 to \$2,770.70 during FY01-FY02 while improving the timeliness and accuracy of the data. These cost savings are replicated each year that the EDW is in operation.

5. The Iowa Department of Corrections (DOC) is able to improve monitoring of fine and restitution payments to the courts by offenders under community supervision.

6. The DOC and CJJP are able to streamline recidivism research and program evaluations, by linking DOC offender information with court information in the enterprise data warehouse.

7. The DOC saved an estimated 48 hours of staff time per single query of sex offender risk information.

8. The DOC is able to save about 40 staff hours and an estimated \$1,000 per district to compile data for annual reports using the JDW. These savings will be repeated each year.

9. With the use of the JDW, the DOC is able to create reports and make comparisons district by district. Without the JDW, the only way to look at these numbers would be to read each of 8 annual reports, without assurance that the data were comparable.

10. DOC is able to run adhoc and system reports that they cannot currently run on their operational system. This is due to the complexity of the reports and limitations of the SQL Server platform.

Iowa Department of Revenue (DOR)

1. Less intrusive to the compliant taxpayer: Through the utilization of multiple internal and external data sources to identify areas of tax non-compliance, DOR has significantly increased data knowledge resulting in the ability to identify the true non-compliant taxpayer.

2. Improved process efficiencies: Through the use of data availability, DOR has improved employee workloads and enhanced the data made available to employees resulting in improved process and workload efficiencies. A number of labor intensive manual processes including the need to work from paper, manually entering data into other internal systems, and manually tracking audit results and performance have been eliminated through the development of automated interface programs moving data to other legacy systems via the data warehouse.
3. Improved customer response time: Data via the warehouse are made available on-line eliminating the need for employees to manually retrieve hard copies of tax returns. Customer inquiries can be handled immediately without need to retrieve paper documents.
4. Improved customer correspondence: Data in the warehouse have been made available for merging into correspondence templates. Thus, improving the quality of customer correspondence and eliminating the need for follow-up inquiries for additional information.
5. Improved Internal Agency Customer Service: Data is now available on-line to the employees who need it to do their daily work activities. This has eliminated tasks such as the retrieval and tracking of paper documents that are performed by others in the agency.
6. Improved External Agency Customer Service: A significant number of audit activities require the review of federal tax return data. Even though this data is provided to DOR as an extract file, the data was not made available to the users until the EDW. Manual requests were done previously creating more work for DOR and the Internal Revenue Service.

c. Citizen Impact

Summarize how the project leads to a more informed citizenry, facilitates accountability, and encourages participatory democracy. If this is an extension of another project, what has been the adopted rate of Iowa's citizens or government employees with the preceding project?

Response:

The primary stakeholders for the EDW are participating state agencies, the Legislature, taxpayers, and the general public through the impact on the General Fund.

1. The participating state agencies and their many customers benefit through improved access to data, streamlined processes for gathering and analyzing information, quicker response times, and better use of resources.
2. The legislature can receive more complete, accurate and timely information on the impact of various policies, legislative, or fiscal options.
3. Taxpayers - Through the utilization and matching of multiple data sources, DOR has successfully identified areas of tax non-compliance. Benefits include smarter workloads (less intrusive to the compliant taxpayer), enhanced correspondence, improved response times, and increased process efficiencies. The number of contested cases related to this project has been extremely minimal.
4. General fund - The Tax Gap Project has generated \$30,000,000 in tax revenues since implementation of the EDW. DOR projects that the Tax Gap project will generate \$10,000,000 in annual receipts on an ongoing basis.
5. Citizens - Benefit through effective management and treatment of offenders to improve public safety and hold offenders accountable (ensuring restitution payments, etc). Other benefits include better use of tax dollars through database decision-making through correctional impact statements.
6. Offenders - Benefit through increased intervention treatments and give them a better chance for

success when returning to society.

d. Public Health and/or Safety

Explain requirements or impact on the health and safety of the public.

Response:

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- Minimally improves Customer Service (0-3 points).
- Moderately improves Customer Service (4-6 points).
- Significantly improves Customer Service (7-10 points).

[This section to be scored by application evaluator.]

Evaluation (15 Points Maximum)

- Minimally directly impacts Iowa citizens (0-5 points).
- Moderately directly impacts Iowa citizens (6-10 points).
- Significantly directly impacts Iowa citizens (11-15 points).

F. Process Reengineering

Provide a pre-project or pre-expenditure (before implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens interact with the current system.

Response:

Criminal and Juvenile Justice Planning

Data from agencies are collected on numerous systems in numerous formats and are not easily accessible without writing additional interface or reporting programs. Data sharing across agencies is limited or non-existent. Most agencies are limited to creating data extracts and providing those extracts to their service partners. It is common for agencies to store duplicated information with differing data definitions, creating confusion in analyzing data across boundaries. For agencies to accomplish information integration with other agencies, they must engage in normalization and standardization activities with each new partner. The systems and processes in place before the EDW was implemented were based upon separate databases and paper-based data storage mechanisms. Examples follow.

Criminal & Juvenile Justice Planning (CJJP) and Department of Corrections (DOC):

1. Before the EDW, CJJP had 1 FTE spending 5-6 months at 35 hours per week preparing clerk of court data for analysis.
2. Before the EDW, information from the Judicial Branches data system (ICIS) required queries of 100 separate databases to be compiled before a composite, state-level analysis could be performed.
3. Before the EDW, Department of Corrections staff monitored offenders fine and restitution payments via requests to the clerks of court, on an individual offender basis.
4. Before the EDW, Department of Corrections staff and CJJP obtained offender recidivism information and follow-up data for treatment program evaluations via case-by-case look-ups.

Iowa Department of Revenue (DOR):

Prior to implementation of the Enterprise Data Warehouse:

1. A number of audit leads were identified by manually reviewing and searching internal databases to determine tax compliance leads.
2. Limited information was available, making it difficult to respond to inquiries without 2 - 3 days delay.
3. Limited data were used to generate potential tax non-compliance leads lists which resulted in taxpayers being contacted that should not have been contacted. This created additional telephone calls,

correspondence, and process inefficiencies.

4. Minimal information was provided on contact letters, often resulting in additional follow-up.

5. Manual tracking of audit activities and audit results.

6. Duplication of efforts - this project brings together all audit activity performed by the agency. Prior to the EDW, office examination and field staff audit inventories were fragmented, resulting in duplication of efforts.

7. Even though the Internal Revenue Service data has always been provided to IDRF via extract files, this information was never available to the employees who need it to do their job. Manual (form) requests were completed and sent to the IRS. In turn, the IRS would photo copy the requested tax return and mail it back to DOR. The EDW provides users with an on-line view; thus eliminating this manual process.

Provide a post-project or post-expenditure (after implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens will interact with the proposed system. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response:

Building agency-based data warehouses on a common platform with common standards creates an environment where data are readily available to support both intra- and inter-agency information dissemination and sharing activities. Each agency will have the opportunity to build join-use applications available within their own networks independently or through a secure Internet zone established by the Enterprise. A partial listing of the improved processes follows.

CJJP and DOC

1. CJJP was able to eliminate the hand-compilation of clerk of court data as a result of the EDW.

2. Court-based data can be compiled within a few hours of a request, reducing the amount of staff time devoted to data retrieval, as well as CPU time and resources.

3. The Department of Corrections was able to upload key information from the Iowa Corrections Offender Network (ICON) to reduce resource demands in their operational system environment, and perform one-step queries that access data from both ICON and the clerks of court, to support fine/restitution payment monitoring and to streamline program evaluations and recidivism research.

Iowa Department of Revenue (DOR):

4. The EDW serves as a common platform for DOR data interfaces to move data to and from other internal systems. This has eliminated many manual processes, improving employee efficiencies and system accuracies.

5. DOR has moved data from the mainframe to the data warehouse to reduce mainframe storage costs and increase mainframe system performance. We will be exploring the opportunities of moving more data from the mainframe to the warehouse and evaluating the benefits and savings. Mainframe data have to be made available to the users and therefore, purging data from the mainframe application has always been a struggle. With the warehouse, we believe we can downsize our integrated mainframe system and provide the purged data to the users through views made available via the warehouse.

6. The data available via the warehouse have eliminated labor intensive, paper producing processes by providing data on-line.

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- Minimal use of information technology to reengineer government processes (0-3 points).
- Moderate use of information technology to reengineer government processes (4-6 points).
- Significant use of information technology to reengineer government processes (7-10).

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[This section to be scored by application evaluator.]

Evaluation (5 Points Maximum)

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- The timeline contains several problem areas (0-2 points)
- The timeline seems reasonable with few problem areas (3-4 points)
- The timeline seems reasonable with no problem areas (5)

H. Funding Requirements

On a fiscal year basis, enter the estimated cost by funding source: Be sure to include developmental costs and ongoing costs, such as those for hosting the site, maintenance, upgrades, ...

	FY05		FY06		FY07	
	Cost(\$)	% Total Cost	Cost(\$)	% Total Cost	Cost(\$)	% Total Cost
State General Fund	\$0	0%	\$0	0%	\$0	0%
Pooled Tech. Fund /IowAccess Fund	\$823,996	100%	\$493,996	100%	\$493,996	100%
Federal Funds	\$0	0%	\$0	0%	\$0	0%
Local Gov. Funds	\$0	0%	\$0	0%	\$0	0%
Grant or Private Funds	\$0	0%	\$0	0%	\$0	0%
Other Funds (Specify)	\$0	0%	\$0	0%	\$0	0%
Total Project Cost	\$823,996	100%	\$493,996	100%	\$493,996	100%
Non-Pooled Tech. Total	\$0	0%	\$0	0%	\$0	0%

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- The funding request contains questionable items (0-3 points)
- The funding request seems reasonable with few questionable items (4-6 points)
- The funding request seems reasonable with no problem areas (7-10)

I. Scope

Is this project the first part of a future, larger project?

☒ YES (If "YES", explain.) ☐ NO, it is a stand-alone project.

Explanation:

This project established the basis for developing and growing data warehouse activities within State Government. The program continues to grow as new users begin data warehouse activities and current users expand their activities.

Is this project a continuation of a previously begun project?

☒ YES (If "YES", explain.)

Explanation:

A. The current Teradata data warehouse supports applications for three state departments. It is anticipated that more agencies will participate in this project, adding data in FY04 and FY05. As data warehousing grows, the ability of the data warehouse to link agency data for improved decision support will be greatly expanded. The Department of Corrections is planning on adding prison institution data, including medical data during FY04, which will also include the Board of Parole data. The Department of Public Health is moving forward with a pilot of historical Substance Abuse Reporting System (SARS) that will include test linkages with community-based corrections information already on the Teradata data warehouse. The Enterprise has created the necessary knowledge and talent base to bring agencies onto

the warehouse quickly and efficiently. The long-term goal is to easily access data across all agencies and perform longitudinal studies for increased service delivery decreased information analysis costs, and better decision making. B. The Enterprise Data Warehouse consists of a NCR World Mark Teradata platform managed by the State of Iowa's Information Technology Enterprise (ITE). The Teradata was installed in December of 1999 and loading of production data was started in January 2000. Final standards for data and metadata are being reviewed. Business Objects has been selected as the query and reporting tool standard for the enterprise data warehouse. ITE is responsible for the support and management of the platforms. ITE established a small development capacity to support bringing agencies onto the warehouse. State agencies can select their own vendor to assess and model their data, use ITE development services, or a combination of both to minimize costs. Initially, three agencies collaborated together to purchase the platform.

C. The Department of Revenue has developed and implemented a Tax Gap program. The Tax Gap Program has generated \$30,000,000 to date in less than 3 1/2 years and is expected to generate at least \$10,000,000 per year on an ongoing basis. The Courts, working in conjunction with the Department of Human Rights, Criminal and Juvenile Justice Planning Division, have loaded adult and juvenile court case processing data from Iowa's 99 counties. This covers all charges, sentences, judges rulings, fines, etc. The Justice Data Warehouse is used for numerous policy and planning decisions affecting adult and juvenile offenders.

Additionally, The Department of Corrections has now added over 900 data elements from their Iowa Correctional Offender Network (ICON) system after the pilot created in FY01 was a demonstrated success.

J. Source of Funds

On a fiscal year basis, how much of the total project cost (\$ amount and %) would be absorbed by your agency from non-Pooled Technology and/or IOWAccess funds? If desired, provide additional comment / response below.

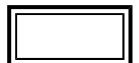
Response:

DOR absorbs its costs through the recoveries generated by its tax gap program for tax gap related activities. The actual dollar amounts absorbed by agency budgets vary from year to year depending on activities.

[This section to be scored by application evaluator.]

Evaluation (5 Points Maximum)

- 0% (0 points)
- 1%-12% (1 point)
- 13%-25% (2 points)
- 25%-38% (3 points)
- 39%-50% (4 points)
- Over 50% (5 points)



Section II: Financial Analysis

A. Project Budget Table

It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related.

The Total Annual Prorated Cost (State Share) will be calculated based on the following equation:

$$\left[\left(\frac{\text{Budget Amount}}{\text{Useful Life}} \right) \times \% \text{ State Share} \right] + (\text{Annual Ongoing Cost} \times \% \text{ State Share}) = \text{Annual Prorated Cost}$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	\$210,231	1	100.00%	\$210,231	100.00%	\$420,462
Software	\$225,615	4	100.00%	\$225,615	100.00%	\$282,019
Hardware	\$200,000	3	100.00%	\$0	0.00%	\$66,667
Training	\$50,000	4	100.00%	\$0	0.00%	\$12,500
Facilities	\$0	1	0.00%	\$0	0.00%	\$0
Professional Services	\$130,000	4	100.00%	\$0	0.00%	\$32,500
ITD Services	\$8,150	1	100.00%	\$8,150	0.00%	\$8,150
Supplies, Maint, etc.	\$0	1	0.00%	\$0	0.00%	\$0
Other	\$0	1	0.00%	\$0	0.00%	\$0
Totals	\$823,996	---	---	\$443,996	---	\$822,297

C. Tangible and/or Intangible Benefits

Respond to the following and transfer data to the ROI Financial Worksheet as necessary:

1. Annual Pre-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation.

Describe Annual Pre-Project Cost:

Quantify Annual Pre-Project Cost:

	State Total
FTE Cost (salary plus benefits):	\$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	\$0.00

Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	\$0.00
Total Annual Pre-Project Cost:	\$0.00

2. Annual Post-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process after project implementation.

Describe Annual Post-Project Cost:

Quantify Annual Post-Project Cost:

	State Total
FTE Cost (salary plus benefits):	\$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	\$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	\$0.00
Total Annual Post-Project Cost:	\$0.00

3. Citizen Benefit - Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of \$10 per hour for citizen time.

Describe savings justification:

Transaction Savings

Number of annual online transactions:	0
Hours saved/transaction:	0
Number of Citizens affected:	0
Value of Citizen Hour	0
Total Transaction Savings:	\$0
Other Savings (Describe)	\$0
Total Savings:	\$0

4. Opportunity Value/Risk or Loss avoidance - Quantify the estimated annual non-operations benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or Federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:

DOR - Tax Gap - \$10,000,000 revenues generated per year.

CJJP/DOC - Better information to decision makers – approximately \$215,000 per year. It is anticipated that the DOC will save at least this much, and likely more, once the project under the current ROI is completed.

5. Benefits Not Readily Quantifiable - List and summarize the overall non-quantifiable benefits (i.e., IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.).

Response:

Data Warehousing, within the State, is a new technology. Over the last several years, the agencies that have begun projects have greatly expanded their activities. As the Government moves toward data based decision-making, integrating data across systems for analysis, trending, and tracking is vital. DOR and CJJP have pioneered Teradata data warehouse activities. These activities show both a large quantifiable return while also showing tremendous cost recouping opportunities and other information cost reductions associated with integrated data and data mining activities. Integrated information is extremely valuable; it allows users to look at more than just the surface of an issue. The most important aspect of data warehousing is its central role as the enterprise decision support system.

CJJP was presented the 2001 National Award for Technical Innovation by The Justice Research and Statistics Association for its Justice Data Warehouse Project.

The DOR Tax Gap Program was presented the 2003 Best Practices Award by The Data Warehousing Institute. Award selection was based on innovation, business impact, ability to share with others, project scope, and project maturity.

DOR has also received notification that the Tax Gap Program was selected as one of ten finalists in the 2003 Innovations Awards Program of the Council of State Governments. Winners of this competition will be announced in September 2003.

ROI Financial Worksheet	
A. Total Annual Pre-Project cost (State Share from Section II C1):	\$0
B. Total Annual Post-Project cost (State Share from Section II C2):	\$0
State Government Benefit (= A-B):	\$0
Annual Benefit Summary:	\$0
State Government Benefit:	\$0
Citizen Benefit:	\$0
Opportunity Value or Risk/Loss Avoidance Benefit:	\$10,215,000
C. Total Annual Project Benefit:	\$10,215,000
D. Annual Prorated Cost (From Budget Table):	\$822,297
Benefit / Cost Ratio: (C/D) =	26.72
Return On Investment (ROI): ((C-D) / Requested Project Funds) * 100 =	1,193.29%

[This section to be scored by application evaluator.]

Evaluation (25 Points Maximum)

- The financial analysis contains several questionable entries and provides minimal financial benefit to citizens (0-8 points).
- The financial analysis seems reasonable with few questionable entries and provides a moderate financial benefit to citizens (9-16 points).
- The financial analysis seems reasonable with no problem areas and provides maximum financial benefit to citizens (17-25).

Note: For projects where no State Government Benefit, Citizen Benefit, or Opportunity Value or Risk/Loss Avoidance Benefit is created due to the nature of the project, the Benefit/Cost Ratio and Return on Investment values are set to Zero.

Appendix A. Auditable Outcome Measures

For each of the following categories, list the auditable metrics for success after implementation and identify how they will be measured.

1. Improved customer service

A. CJJP Data Warehouse

1. % of data requests complete: % that could have been completed prior to JDW implementation (Staff evaluation)
2. Average completion time for correctional impact statements (Staff time studies)
3. Average completion time of district and statewide community-based corrections annual reports (Staff time studies)

B. Department of Revenue

1. Reduce the number of revised billings by 15%; measurement accomplished through pre and post EDW reports on revised audits.
2. Reduce the number of contested tax billings by 5%; measurement accomplished through tracking and reporting of contested cases.
3. Reduce the number of manual requests for information from the Internal Revenue Service by 75%; measurement accomplished through tracking of manual requests.
4. Improve the turnaround time on taxpayer responses; measurement accomplished through correspondence tracking reports.

2. Citizen impact

A. Justice Data Warehouse

1. Ratio of potential financial impact of proposed legislation to estimated financial impact of enacted legislation.

B. Department of Revenue Data Warehouse

2. Reduce the number of contacts made to compliant taxpayers by 5%.
3. Through segmentation analysis, identify at least two areas of non-compliance and establish taxpayer education programs.

3. Cost Savings

A. Justice Data Warehouse

1. Ratio of staff cost per query pre and post warehouse (staff time studies)
2. Ratio of staff cost per community-based corrections annual reports pre and post warehouse (staff time studies)

B. Department of Revenue Data Warehouse

1. Improve auditor and examiner time per audit; efficiency measurement accomplished through pre and post EDW time activity reports.
2. Increase the return on investment for audit and examination activities; measurement accomplished through pre and post EDW ROI reports.

4. Project reengineering

These metrics are determined for each project during the planning phase for accomplishing data warehouse activities.

5. Source of funds (Budget %)

Planned and Tracked at the Enterprise level for enterprise activities. Managed at the agency level for agency activities.

6. Tangible/Intangible benefits

Increase in employee job satisfaction; surveys will be conducted to determine employee satisfaction with product deliverables.

Ability to evaluate programs and improve outcomes to lower recidivism rates and reduce prison capacity requirements.

Participating in the Enterprise data warehouse to increase information sharing across agencies and target services more effectively. Ability to identify tax gap audit opportunities to fairly enhance revenue.

Creating a technical support environment for employees to rapidly have access to data to improve their ability to deliver services and increase their morale.

Ability to conduct longitudinal studies across agencies.

Using data warehouse technology has improved the ability to anticipate future costs; improved prison population projections due to knowledge of up-to-the-month trends in criminal case filings and incarceration rates; the development of better responses to crime and criminal behavior; the passage of improved sentencing laws; improved allocation of resources for the justice system; and decision support to ensure fair and equitable treatment of offenders. Another focus of the data warehouse is to avoid duplicate data entry, improve staff efficiency, and provide the most accurate information available to staff and management. It is estimated that the data warehouse will have cost avoidance savings across Iowa government of between \$1 million and \$2 million per year.

The overall benefit of this project is related to the increasing demand for reliable information with which to describe and assess the operations, clientele, and practices of Iowa's services. The previous years of operation have proven that this initiative will result in many benefits stemming from informed decision-making, trend analysis, service delivery and agency cooperation across the enterprise.

[Return](#)